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**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 09/514,489  
Filing Date: February 29, 2000  
Appellant(s): BANIK ET AL.

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Joel Justiss  
For Appellant

This is in response to the appeal brief filed 4/20/06 appealing from the Office action mailed 4/20/05.

**(1) Real Party in interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

The appellant's statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

6,044,266	Kato	3-2000
6,301,287	Walley et al.	9-2001
5,960,357	Kim	9-1999

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-2, 4-6, 8-9, 11-13, 15-19 and 22, are rejected under 35 U.S.C. 103(a) as being unpatentable over Kato (US Patent 6,044,266)

Regarding claims 1, 8 and 15, Kato disclose for use in communicating data over a voice channel between a transmitter of a base station and a receiver of a handset of a cordless telephone, a system comprising:

a silence detector (see col.8 lines 41-40), that identifies a pause in voice traffic that is to be transmitted over and generates an interjection signal during said pause (see fig.5 and col.9 lines 11-12);

data injector, that receives said interjection signal and responds by causing said transmitter to transmit data to said receiver over said voice channel (see col.3 lines 21-22, col.5 line 57 through col.5 line 20).

Kato fails to disclose a silence detector couple to transmitter.

Kim discloses a silence detector couple to transmitter (see 122, 144, fig.1). Therefore, It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of Kato with the above teaching of Kim in order to provide connection circuits and controlling signals to the transmission/receiving unit.

Regarding claims 2,9 and 16, the modified Kato discloses voice traffic is analog voice traffic (see Kato, col.7 lines 59-64).

Regarding claims 6, 13 and 19, the modified Kato discloses transmitter transmits said voice in frames (see Kato, col.9 lines 11-12).

Regarding claims 21-22, the modified Kato discloses system receives said voice traffic and said data from a telephone line coupled thereto (see Kato, col.3 lines 40-45).

Regarding claims 4, 11 and 17, the modified Kato discloses said data comprises caller identification data (see Kim, col.5, 22-23, "telephone number" corresponds to "caller identification data").

Regarding to claims 5, 12 and 18, the modified Kato fails to disclose said data comprises menu item selection data. However, the Examiner takes an Official notice that the concept menu display for user would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system for a digital display.

Claims 7, 14 and 20 are rejected under 35 U.S.C. 103(e) as being unpatentable over Kato in view of Kim and further in view of Walley et al. (US Patent 6,301,287).

Regarding to claims 7, 14 and 20, the modified Kato fails to disclose comparing a peak energy of said voice traffic to a noise floor reference.

Walley et al. disclose comparing a peak energy of said voice traffic to a noise floor reference (see col.12 lines 5-25). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system of the modified Kato with the

above teaching of Walley et al. in order to compare energy level between peak level and noise floor level.

#### **(10) Response to Argument**

Applicants argue, page 9, 1<sup>st</sup> paragraph, “.....this is clearly evident from figure 1 of Kato that illustrates the packet transmission path f going from the mobile packet data station to the base station. The schematic timing diagrams of Kato also indicate that data packets are transmitted from the mobile packet data station to the base station. Kato provide no teaching or suggestion that data is transmitted from the base station to the mobile voice station”. The Examiner respectfully disagrees, the Examiner does not rely on the first embodiment of kato teaching, the Examiner relies on the second embodiment of Kato teaching data transmission from the base station to the mobile voice station, started from col.8 lines 35.

Applicant argue, page 10, 1<sup>st</sup> paragraph “Even in the second embodiment, Kato teaches the mobile packet data station transmits data to the base station during silent periods (see col.8 lines 45-46, col.9 lines 24-35, col.10 lines 2-23, fig.7B)”. The Examiner does not rely on the above cited reference which refers aback to the first embodiment. Kato disclose “A second embodiment of the present invention is described with reference to Fig.5. The second embodiment can be used with a base station that does not currently perform VOX control” (see col.8 lines 36-40). Kato further added “Thus, down-link packet data communication can be performed by using a channel under the VOX control by performing VOX control at the base station” (see col.8 lines 40-41). Wherein, Kato teaching VOX control operation as “This series of ending and beginning voice bursts is called (Voice-Operated Transmission(VOX)... ..

The switch 5 starts and stops the transmission of the data packets according to information from the channel monitor/control section 3” (see col.4 lines 57 through col.5 lines 20).

Although, this portion describes the VOX operation, data injection on a voice channel, from the mobile station to the base station in the first embodiment. However, it is also performed in the second embodiment: “Thus, down-link packet data communication can be performed by using a channel under the VOX control by performing VOX control at the base station” (see col.8 lines 40-41 and col.9 lines 5-10).

Applicants argue, page 10, 2<sup>nd</sup> paragraph “Kim has not cited to cure the above deficiencies of Kato .....” As the Examiner mentioned as above, Kato disclose the base station performed a data injection on a voice channel and downlink transmission. And Kim remedies Kato’s deficiency of a hardware piece that a silence detector couple to the transmitter (see kim, 122, 116, fig.1).

In response to Applicant argument, page 11, regarding dependent claims 2, 9 and 16. Kato discloses data downlink transmission during silent period in a channel being used for voice communication as mention above. Wherein Kato disclose a talking burst when transmitting sound (see col.9 lines 45-47, “talking burst”, “transmitting sound” reads on “analog voice traffic”) and Kim (col.4 lines 24-39).

In response to Applicant argument, page 12, 1<sup>st</sup> paragraph, regarding dependent claims 4, 11 and 17. The modified Kato and Kim discloses data downlink transmission during silent period in a channel being used for voice communication as mention above. And Kim discloses feature caller identification data (see Kim, col.5 lines 22-39).

In response to Applicant argument, page 12, 1<sup>st</sup> paragraph, regarding dependent claims 5, 12 and 18. The modified Kato and Kim discloses data downlink transmission during silent period in a channel being used for voice communication as mention above. However, the Examiner takes an Official notice that the concept menu display for user would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the system for a digital display.

In response to Applicant argument, page 13, regarding dependent claims 6, 13 and 19. The modified Kato and Kim discloses data downlink transmission during silent period in a channel being used for voice communication as mention above. The modified Kato discloses transmitter transmits said voice in frames (see Kato, col.9 lines 11-12).

In response to Applicant argument, page 13, regarding dependent claims 21-22. The modified Kato and Kim discloses data downlink transmission during silent period in a channel being used for voice communication as mention above. The modified Kato discloses system receives said voice traffic and said data from a telephone line coupled thereto (see Kim, col.3 lines 35-36).

In response to Applicant argument rejection under 103(a) over Kato in view of Kim and Walley, page 14, 2<sup>nd</sup> paragraph. Kato discloses monitoring channel based on measures signal level of the voice bursts. However, without further detail to detect the present of voice on the channel such as comparing noise floor and a peak energy (present of voice). Walley covers the Kato and Kim deficiency comparing noise floor and a peak energy (see col.12 lines 5-25).

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,



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